STATE OF CALIFORNIA THE RESOURCES AGENCY.

Amold Schwarzenegger, GOVERNOR

### DEPARTMENT OF FISH AND GAME

CENTRAL COAST REGION (707) 944-5520 Mailing address: POST OFFICE BOX 47 YOUNTVILLE CALIFORNIA 94599 Street address: 7329 SILVERADO TRAIL NAPA CALIFORNIA 94558



March 14, 2006

Notification Number: 1600-2006-0098-3

Mr. Chuck Morton Caltrans – District 4 111 Grand Avenue Oakland, California 94623

### 1602 LAKE AND STREAMBED ALTERATION AGREEMENT

This agreement is issued by the Department of Fish and Game pursuant to Division 2, Chapter 6 of the California Fish and Game Code:

WHEREAS, the applicant Mr. Chuck Morton, Caltrans District 4, hereafter called the Operator, submitted a signed NOTIFICATION proposing to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed or lake of the following water: Russian River in the town of Geyserville, in the County of Mendocino, State of California; and

WHEREAS, the Department has determined that such operations may substantially adversely affect existing fish and wildlife resources including water quality, hydrology, aquatic or terrestrial plant or animal species; and

WHEREAS, the project has undergone the appropriate review under the California Environmental Quality Act; and

WHEREAS, the Operator shall undertake the project as proposed in the signed PROJECT DESCRIPTION and PROJECT CONDITIONS (attached). If the Operator changes the project from that described in the PROJECT DESCRIPTION and does not include the PROJECT CONDITIONS, this agreement is no longer valid; and

**WHEREAS**, the agreement shall expire on <u>December 31, 2008</u>; with the work to occur between January 1 and December 31; and

WHEREAS, nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of the responsibility for compliance with applicable Federal, State, or local laws or ordinances. Placement, or removal, of any material below the level of ordinary high water may come under the jurisdiction of the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act;

**THEREFORE**, the Operator may proceed with the project as described in the PROJECT DESCRIPTION and PROJECT CONDITIONS. A copy of this agreement, with attached PROJECT DESCRIPTION and PROJECT CONDITIONS, shall be provided to contractors and subcontractors and shall be in their possession at the work site.

Failure to comply with all conditions of this agreement may result in legal action.

This agreement is approved by:

Cincles Cata Cano Robert W. Floerke Regional Manager

Central Coast Region

ce:

Bill Cox Warden Parlato Lieutenant Riske Bill Hearn / NOAA Fisheries, Santa Rosa STATE OF CALIFORNIA THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF FISH AND GAME CENTRAL COAST REGION (707) 944-5520 Mailing address: POST OFFICE BOX 47 YOUNTVILLE, CALIFORNIA 94599

Street address: 7329 SILVERADO TRAIL NAPA, CALIFORNIA 94558



Notification Number: 1600-2006-0098-3

Russian River, Sonoma County

Mr. Chuck Morton
Caltrans – District 4
111 Grand Avenue
Oakland, California 94623

# PROJECT DESCRIPTION and PROJECT CONDITIONS

The proposed project involves trestle installation, pile driving and equipment operations associated with the replacement of the Geyserville Bridge on Route 128 in Sonoma County. The existing structure crosses the Russian River east of Geyserville on a 1932 steel pony truss bridge, 973.5' long, and is the only crossing of the river between Lytton Station Road/Alexander Valley Road, in Healdsburg, and Crocker Road, in Cloverdale. Pier 2 was damaged by floodwaters during the New Years Eve/Day storm of 2005/2006 causing the bridge to be closed to vehicular traffic.

Caltrans is proposing to construct a temporary trestle on the upstream side of the damaged bridge to allow the stabilization of Pier 2 prior to its demolition, and provide access to the work site during the construction of the new bridge. The trestle shall be approximately 1000 feet long and up to 50 feet wide. It shall be installed during March of 2006 and will be removed prior to November of 2007. The trestle shall be constructed in 2 phases. The first phase will install the first 250 feet of trestle beginning at the upstream side of the western bank. This section of trestle will be used to stabilize Pier 2 by installing 24" steel pipe piles at each of the pier corners and superstructure to support the bridge roadway for demolition. The second phase will complete the trestle to the eastern side of the river.

All demolition work will be done from the newly constructed trestle. No demolition material will be allowed to fall into/onto the river or river bed. Demolition is scheduled to begin in March of 2006 and is expected to be completed by the end of April.

The new bridge is expected to be constructed as the old bridge is demolished on or about April I, 2006. Early work will occur in the abutment areas of the bridge which are outside of the active river channel.

Construction of the new bridge will require the installation of two new 48" diameter Cast In Steel Shell (CISS) pipe piles per pier to support the superstructure and bridge deck. The use of 48"

Operator's initials Notification Number: 1600-2006-0098-3

Page 1 of 7 Date prepared: March 14, 2006 piles will result in approximately 650 cubic yards of material removed from the piles. The new bridge will be approximately 51' wide consisting of 2 12' traveled ways, 2 8' shoulders, a 5' wide sidewalk (only on the southern side of the bridge) and a 2' wide positive barrier between the southern shoulder and the sidewalk. It will be constructed of pre-cast box girders approximately 100' long.

An unnamed creek on the USGS Geyserville Quad sheet, commonly know as Plug Creek, is located in the south eastern quadrant of the project. Construction of the new bridge and its approach fills will require culverting approximately 100 feet of Plug Creek prior to discharging it to the Russian River. A 78" steel spiral ribbed culvert will be used and the outlet will include rock slope protection.

Construction activities shall impact approximately 8 acres of habitat including 2.5 acres within the banks of the Russian River.

In addition, PG&E has proposed micro-tunneling a gasline 30' under the Russian River.

### Resources at Risk

The Russian River and its tributaries support habitat for Chinook salmon (Oncorhynchus tshawytscha), coho salmon (O. kisutch), and steelhead trout (O. mykiss). Due to declining populations over most of their range, Chinook salmon, and steelhead trout of the Russian River basin are listed as "threatened" under the Federal Endangered Species Act (ESA) and Coho salmon are listed as "endangered" under the California Endangered Species Act (CESA). Plug Creek an intermittent tributary to the Russian River, does not contain habitiat for listed fish but does contain habitat for foothill yellow-legged frog (Rana boylii) and northern red-legged frog (Rana aurora aurora), both California Species of Special Concern.

### Conditions:

- All equipment activity within the Russian River channel not conducted on the temporary trestles shall be confined to the period June 15 to October 31 of each year. Pier removal in the wetted channel shall also be confined to the same season. If the Operator needs more time to complete the authorized activity, the work period may be extended on a weekly basis by Corinne Gray at 707-944-5526.
- 2. All activity below the break in slope shall be confined to periods of dry weather. Seventy-two-hour weather forecasts from the National Weather Service shall be consulted prior to start up of any phase of the project that may result in sediment runoff to the stream. Activities may not begin until there is a minimum of 24 hours without rain and there is no rain forecasted to occur for the following 24 hours. If rain is forecasted to occur within 24 hours, construction activities shall be halted, and the site winterized.
- The Operator shall provide the Department of Fish and Game (DFG) with a biweekly status report on all activities authorized by this Agreement. The status report shall list the schedule of events (beginning dates, work in progress, and completion dates). The status report shall be

Operator's initials Notification Number: 1600-2006-0098-3

submitted to DFG every other Monday until the list of authorized activities is complete or there are scheduled periods of inactivity. The status report shall be sent via email transmittal to <a href="mailto:cgray@dfg.ca.gov">cgray@dfg.ca.gov</a>.

- 4. Prior to any demolition work within the river bed, material shall be placed below the area of work to catch and contain any debris that may fall from the bridge.
- 5. All temporary trestle piles installed within the wetted channel shall be no greater than 12" in diameter. If it is necessary to install 24" steel pipe piles in the wetted channel, an isolation pile shall be installed and dewatered to minimize dB levels.
- 6. Material removed for installation of the CISS shall not be used to fill in depressions left over from the removal of the old piers. Material may be temporarily stored on the gravel bar between June 15 and October 15 of each year. All fines and silt laden gravels shall be removed from the project area prior to October 15 of each year. Material shall be disposed of at an upland site with proper siltation controls and shall not be located where it will likely be washed back into the water or where it will cover aquatic or riparian vegetation. Only excavated silt-free gravels may be left within the stream channel.
- 7. All temporary and permanent pile driving greater than 12" diameter in the wetted channel or greater than 24" within 10 meters of the wetted channel shall be monitored (peak, rms, and SEL). Variations in substrate, water depth and pile driving intensity may increase peak SPLs above lethal levels and monitoring will allow the operator to modify pile driving activities and effectively implement appropriate minimization measures. Hydroacoustic data shall be submitted to DFG on a biweekly basis. If underwater SPLs for each pile type and size do not vary to a large degree, then Caltrans may request approval from DFG to discontinue hydroacoustic monitoring.
- Activities may require that the operator conduct fish rescue operations. All fish captured shall
  be identified and recorded. Data shall be provided to DFG on a biweekly basis. Any fish kill
  shall be collected, recorded and reported to DFG immediately.
- Project operations shall leave gravel bars intact and shall not create situations were pits or depressions may trap fish.
- 10. Boring activities and set-up activities for micro tunneling operations shall be situated outside of wetlands and riparian areas.
- 11. The Operator shall design, pre-plan and direct the microtunneling operations in such a way as to minimize the risk of spills of all types. The Operator shall provide a contingency plan, in the event of the release of drilling lubricants through fractures in the streambed or bank ("fracouts").
- 12. Prior to dismantling work commencing at the bridge site, the bridge shall be surveyed for bats by a qualified biologist. If bats are detected, Caltrans shall submit a bat mitigation plan for DFG approval. Bats shall not be disturbed without specific notice to and consultation with DFG. DFG reserves the right provide additional provisions to this agreement designed to

Operator's initials

Notification Number: 1600-2006-0098-3

protect nesting/roosting bats.

- 13. The Contractor shall erect temporary construction fencing to preclude unauthorized activities within the banks of the Russian River. Temporary construction fencing shall be removed prior to October 15<sup>th</sup> of each year or within 30 days of the completion of construction work.
- 14. Prior to clearing and grubbing operations, a qualified biologist shall clearly mark/flag trees within the designated construction corridor that should be avoided or will be trimmed only as directed by the arborist. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the construction corridor shall not be removed or damage without prior consultation and approval of DFG. Where feasible, hand tools (chain saw, etc.) shall be used to trimmed vegetation to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the riparian/stream zone.
- 15. No trees shall be disturbed that contain active bird nests until all eggs have hatched and young birds have fledged. To avoid potential impact to tree nesting birds, trees and shrubs designated for removal should be cut down during the time period of August 15 to February 15. Trees may be removed between February 15 and August 15 provided the Operator has a qualified biologist survey the proposed work area to verify the presence or absence of nesting birds. At the discretion of DFG, tree removal may be authorized between the period of February 15 and August 15. The Operator is advised that the U. S. Fish & Wildlife Service regulates activities that may be covered under the Migratory Bird Treaty Act. The Operator is advised to contact the U. S. Fish & Wildlife Service prior to removing trees with active nesting. Vegetation shall be "downed" in such a manner as to minimize disturbance to stable soil conditions.
- 16. Erosion control measures shall be monitored during and after each storm event. Modifications, repairs and improvements to erosion control measures shall be made whenever needed. Upon DFG determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation, shall be halted until effective DFG approved control devices are installed, or abatement procedures are initiated. DFG may take enforcement action if appropriate turbidity and siltation control measures are not deployed.
- 17. The Plug Creek culvert shall be adequately sized to carry peak storm flows and shall be properly aligned within the stream to provide improved aquatic species passage if possible.
- 18. The project shall temporarily impact approximately 8 acres of upland and riparian habitat. In order to mitigate impacts associated with the project a revegetation plan shall be prepared and submitted to DFG for approval prior to December 31, 2006. The revegetation plan shall include restoration of areas impacted by operations, as well as, invasive species removal and restoration of an additional 8 acres of habitat. Revegetation activities shall be implemented prior to December 31, 2008.
- 19. The project shall permanently impact approximately 100 linear feet of Plug Creek. In order to mitigate impacts associated with the permanent loss of stream habitat, a mitigation plan shall be submitted to DFG for approval prior to December 31, 2006. The plan shall include

Operator's initials Notification Number: 1600-2006-0098-3

restoration and enhancement of approximately 300 linear feet of creek within the watershed. Restoration activities shall be implemented prior to December 31, 2008.

- 20. Assurances shall be provided to DFG for the amount of the complete restoration, as approved by DFG, prior to December 31, 2006. The written guarantee shall be approved by DFG and shall provide assurances that funds are available to complete restoration and mitigation activities.
- 21. To ensure a successful revegetation effort, all mitigation plantings shall be monitored and maintained (including irrigation as necessary) for five years. All planting shall have a minimum of 80% survival at the end of 5 years and shall attain 70% cover after three years and 75% coverage after 5 years. If the survival and/or cover requirements are not meeting these goals, the Operator is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five years after planting. An annual status report on the mitigation shall be provided to DFG by December 31 of each year. This report shall include the survival, percent cover, and height of both tree and shrub species. The number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. Photos from designated photo stations shall be included.
- 22. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel and banks as defined by the break in slope. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away from the stream prior to refueling and lubrication.
- 23. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter the River, by Operator or any party working under contract, or with the permission of the Operator, shall be removed immediately.

### General Conditions:

- 24. The US Army Corps of Engineers (COE) has permitting requirements for certain instream projects under Section 404 of the Federal Clean Water Act. A COE permit may be required for installation of over one cubic yard of material per linear foot within a stream channel. The applicant shall contact the COE before starting any work activities.
- 25. The RWQCB has permitting requirements for certain projects under Section 401 of the Federal Clean Water Act. The applicant shall contact the RWQCB before starting any work activities.
- 26. This agreement does not allow for the take, or incidental take of any State or Federal listed

threatened or endangered listed species. The Operator is required, as prescribed in the state or federal endangered species acts, to consult with the appropriate agency prior to commencement of the project. Any unauthorized take of such listed species may result in prosecution.

- 27. At DFG's request, Operator shall provide DFG with information necessary to establish compliance with this Agreement.
- 28. DFG personnel or its agents may inspect the work site at any time in the duration of the construction, revegetation, or monitoring phases of this project.
- 29. In the event that the project scope, nature, or environmental impact is altered by the imposition of subsequent permit conditions by any local, state or federal regulatory authority, the Operator shall notify DFG of any imposed project modifications that interfere with compliance to DFG conditions.
- 30. To the extent that any provisions of this Agreement provide for activities that require the Operator to traverse another owner's property, such provisions are agreed to with the understanding that the Operator possesses the legal right to so traverse. In the absence of such right, any such provision is void.
- 31. If unforeseen problems arise which are causing significant adverse impacts to fish and/or wildlife resources or as further data is accumulated for analysis, the applicant may be required to remediate the situation to the satisfaction of DFG.
- 32. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.
- 33. The Operator is liable for compliance with the terms of this Agreement, including violations committed by the contractors and/or subcontractors. DFG reserves the right to suspend construction activity described in this Agreement if DFG determines any of the following has occurred:
  - a) A). Failure to comply with any of the conditions of this Agreement
  - b) B). Information provided in support of the Agreement is determined by DFG to be inaccurate.
  - c) C). Information becomes available to DFG that was not known when preparing the original conditions of this Agreement (including, but not limited to, the occurrence of State or federally listed species in the area or risk to resources not previously observed)
  - d) D). The project as described in the Agreement has changed or conditions affecting fish and wildlife resources change.
- 34. Any violation of the terms of this Agreement may result in the project being stopped, a citation being issued, or charges being filed with the District Attorney. Contractors and subcontractors may also be liable for violating the conditions of this agreement.

### Amendments

The Operator shall notify DFG before any modifications are made in the project plans submitted

to DFG. Project modifications may require an amendment or a new notification.

To modify the project, a written request for an amendment must be submitted to DFG (1600 Program, Post Office Box 47, Yountville, California 94599). Amendments to the original Agreement are issued at the discretion of DFG.

# YOUR SIGNATURE BELOW DOES NOT ALONE CONSTITUTE A COMPLETED STREAMBED ALTERATION AGREEMENT.

Please note that you may not proceed with your project until after your proposed project has been reviewed under CEQA and DFG signs the Agreement.

I, the undersigned, state that the above is the final description of the project I am submitting to DFG for CEQA review, leading to an Agreement, and agree to implement the conditions above required by DFG as part of that project. I will not proceed with this project until DFG signs the Agreement. I also understand that the CEQA review may result in the addition of measures to the project to avoid, minimize, or compensate for significant environmental impacts:

Operator's name (print):	CHUCK	MOTETON	
Operator's signature:	Clent	leasto	
Signed the/47\	day of	March	, 2006

	1600-2006	For Depart	ment Use Only	1	
Notification Number:	0098-3	Date Received:	3/6/06	Date Completed:	
Foes Enclosed?		00.00a,h	100		
Action Taken/Notes:	★ 08-2 - 80	१० ६ ५६		(	
	DEPT- OF TO	HOTERSO92141	, REC'D 31	96/0A	
					Qa. Oa \$7
		STATE OF	CALIFORNIA		Parlat

			THE DEPART	TATE OF CALIF RESOURCES IMENT OF FISH AKE OR STF	AGENCY I AND GAME REAMBED A	LTERATION	Riske
	<u> </u>	<u></u>		Notification T	ype		
Notification Type  1601 (Public)							
1603 (Private) Commercial Gravel Extraction			n (No)				
☐ Water Application			(No)				
			Ā	pplicant Inform	atlon		
	I.		Name	ppadaliz maom			Telephone/FAX
·	1		vigina	111 Coppd A		·	Business: 510.286.5016
Appilcant:	cant: Chuck Morton		111 Grand Avenue Oakland, CA 94523			Fax: 510.286.4462	
Operator:	Calirans			111 Grand Avenue		Business: 510.286.5016	
Maintenance Services			Oakland, CA 94623			Fex: 510.286.4482	
Contractor.							Business;
(If known)							Fex:
Contact Person:	1						Business
(if not applicant)							Fax;
0.44			,			Business:	
Property Owner: Caltrans					Fax:		
<u> </u>							
	THE THE PART AND			Project Locat	ion .		
Location State Highway 128 Russian River Bridge east of Geyserville at Post Mile 5.44  Description:							
County				Assessor's Parcel Number			
Sonoma			· · · · · · · · · · · · · · · · · · ·	various			
USGS Map			Township	Range	Section	Letitude/Longitude	
Geyserville						38d42m47.1sN, 122d53m39.0sE	
Name of River, Str	eam, or Lake:	:	Plug Creek, Russian R	lver		CHA	
Tributary To?	Plug Creek	tributar	y to the Russian River, R	ussian River tr	ibutary to the	Pacific Ocean	1

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION (Continued)

an anti-order to the control of the

			Projec	t Descripti	on			
Project Name: State Highway 128 Geyserville Bridge Replacement Project								
Proposed Start Date:	03/01/2006	Proposed Completion Date:	11/01/2007	Project Cost	\$ 50 Million	Number of Stream Encroachments: (Timber Harvest Plans only)		
Describe project	below: (Attach s	seperate pagas if nacess	any)					
Please see atta	ched Project De	scription and Plans.						
					,			
						Continued on separate page		
			* 44. ib. ii	nts/Enclos				
					<del> </del>			
	—— <u> </u>	uments listed below an	***************************************		······································	Construction plant and detailed		
Project descrip		Map showing project loc from nearest city or town		listances an	s/or difections	Construction plans and drawings pertaining to the project		
Attach or enclose	the documents i	Isted below, if complete	, and check the	correspond	ing boxes.			
Completed	1-	Negative Declaration		Environme	ntal Impact Report	Notice of Examption  Notice of Determination		
CEQA documents		Mitigated Negative Deci	aration			Notice of Determination		
Copies of applicational confidence of the confid	ieral	Local. Describe:						
permita, agreeme or other authoriza	dons:	State. Describe: Section 401 Regional Water Quality Control Board  Federal. Describe: Section 404 US Army Corps of Engineers						
				11 441 9511				
and the lader manufac	n in farmat in he co	ntrup or incorport I may	he subject to civi	i or cominai :	erosecution and th	sign this document. I understand that in the e Department may consider this notification		
be incomplete and	tior cencel any La Jesophed besein au	ike or Streambed Aiterat nd that I may be subject	lion Agreement is to civil or crimins	ssued pursuu vi prosecutioi	ent to this notificati • for undertaking a	ion, i understand that this notification is veilu project that differs from the one described		
rein, unless i have	notilied the Depa	ertment of that project in	accordance with	section 160	1 or 1603 of the Fi	ien and Game Code.		
reambed Alteration thorize the Depart	n Agreement pursument to enter the	east to this outification	in the event the i act described her	Dooanment d	ieterminas that a s	heroin will take place before lasuing a Lake or site inspection is necessary, I hereby he property at any reasonable time and certify		
		ontact me at (insert telep		510	.286.5016 or 51	0.715.9192 to schedule a date and		
time to enter the	property where	he project described he	rein will take plan	ce and unde	stand that this me	y delay the Department's evaluation of the		
project describer	i siareni.	lul luit.	n			3/6/06		
		Operator or O	perator's Repr	esentative		'		

Caltrans 3/6/2006

# Caltrans Sonoma 128 PM 5.44 EA 2S8403 Russian River Geyserville Bridge Replacement Project Description

Route 128 in Sonoma County is a two-lane conventional highway connecting Sonoma and Napa Counties. It crosses the Russian River east of Geyserville on a 1932 steel pony truss bridge, 973.5' long, and is the only crossing of the river between Lytton Station Road/Alexander Valley Road, in Healdsburg, and Crocker Road, in Cloverdale. Pier 2(earlier documentation referred to Pier 2 as Pier 6) of the bridge was damaged by floodwaters during the New Years Eve/Day storm of 2005/2006. The damage consisted of the through and through cracking of the pier cap and web wall of Pier 2, the rotation of the pier in the downstream direction, and the dropping of the bridge spans, being supported by Pier 2, approximately 9 inches. The bridge is now closed to vehicular traffic, and all traffic is detoured to the Lytton Station Road exit (to the south) adding approximately 20 miles to the drive.

Caltrans proposes to construct a temporary trestle on the upstream side of the damaged bridge. The purpose of this trestle is two fold: 1) to allow the stabilization of Pier 2 prior to its demolition; and 2) provide access to the work site during the construction of the new bridge. The trestle will span the river and will be approximately 1000 feet long and up to 50 feet wide. The trestle will be installed during March of 2006 and will be removed prior to November of 2007. The temporary trestle will be supported on 24" steel pipe piles, for its entire length except in the wetted channel where 12" steel pipe piles will be used (if necessary). If it is necessary to install 24" steel pipe piles in the active river, an isolation pile will be installed, dewatered and then the 24" pile will be driven. Construction of this temporary trestle will begin in March 2006 and is expected to be completed by the end of May. The trestle will be constructed in 2 phases. Phase 1 will be the first 250 feet of trestle, begins at the upstream side of the western bank. This section of trestle will be used for the stabilization of Pier 2. After the completion of Phase 1 of the trestle construction. Pier 2 will be stabilized by the installation of 24" steel pipe piles at each of the pier corners. Superstructure will then be installed to support the bridge roadway via the temporary 24" steel pipe piles. Phase 2 will complete the trestle to the eastern side of the river. Once the trestle has reached the eastern flood terrace/bench, an access ramp will be constructed to touchdown. The trestle will be constructed to be able to support any necessary pile driving equipment or cranes necessary to construct the new bridge. Access roads to the trestle will connect to the existing highway outside of the zone of new bridge construction. Construction access roads on the river bed/gravel bar will also be used to facilitate and expedite the work.

Piles for the trestle and stabilization of Pier 2 will be installed through the river gravel bar to avoid impact to salmonids in the active stream channel. It may be necessary to relocate some of the existing gravel material to accomplish this work. At no time will the river flow be blocked. This will allow for the continual movement of salmonids and other fish to migrate through the work zone. This will also allow for the continued use of the river by boaters, primarily kayakers and canoeists. This recreational use will be maintained throughout the period of construction except during the placement of the pre-cast concrete girders of the new bridge.

During the demolition phase of the project, after Pier 2 is stabilized, work would be done from the newly constructed trestle. This demolition work will entail the removal of several of the concrete deck slabs and some of the steel support structures prior to the removal of an

3/6/2006 Caltrans

individual pony truss section. This early work is necessary to reduce the amount of weight that the crane will have to lift. No demolition material will be allowed to fall into/onto the river or river bed. Demolition is scheduled to begin in March of 2006 and is expected to be completed by the end of April. Existing fir piles 25' long, which are supporting the existing piers, will be removed to an estimated depth of 3 feet below the bottom of the existing footing or as directed by the Resident Engineer. Removal to this depth is anticipated to reduce the risk of the piles being exposed in the future. Removal of any hazardous material, such as lead paint and asbestos, associated with the demolition of the bridge will be addressed in the Special Specification Provisions.

Prior to any demolition work over the dry river bed, material will be placed below the area of work to catch and contain any debris that may fall from the bridge. Over the wetted channel. material will be suspended below the bridge to catch any falling material.

In order to lighten the load that the crane must lift, portions of the concrete deck will be removed. This will be done by saw cutting the concrete and then removing these saw cut portions. After the deck is saw cut and removed, several of the steel stringers, which supported the deck, will be removed to further lighten the load. Once it is determined that the pony truss span is light enough to be lifted, it will be 'unbolted' from the piers and lifted, by crane, and placed on the temporary trestle to be further demolished and trucked offsite.

After the deck and the pony trusses are removed, the concrete piers will be demolished. This will, in all likelihood, be done with a hoe-ram. A hoe-ram is device attached to an excavator that is specifically designed to fracture concrete and rock so that it can be removed. Once the concrete pier-cap, -web wall, and -footing are removed, and the concrete hauled off site, the existing 25' long fir piles, which support the existing piers, will be removed to an estimated depth of 3 feet below the existing pier footing or as directed by the Resident Engineer. Removal to this depth is anticipated to reduce the risk of the piles being exposed in the future.

Piers that remain in the wetted channel of the river will only be removed during the period of June 15 to October 15 to minimize the impact to any fish that may be in the river at this location.

Depending on new bridge construction sequencing, and the availability of materials, the new bridge will be constructed as the old bridge is demolished. The new bridge construction is scheduled to begin on or about April 1, 2006. This early work will likely occur in the abutment areas of the bridge which are outside of the active river channel.

Construction of the new bridge will require the installation of new large diameter pipe piles to support the superstructure and bridge deck. These pipe piles will be 48" in diameter and will require two piles per pier. These piles will be driven to a depth at which there is sufficient skin friction to support the new bridge, estimated to be up to 150 feet. These piles/columns will be considered to be Cast In Steel Shell (CISS). After the CISS are driven to tip, they will be mucked out to allow for the placement of steel rebar cages and concrete. Some of the mucked material will be used to fill in the depressions left over from the removal of the old piers while the rest of the material will be placed on the river gravel bar. Geotechnical borings have shown that there is sand and gravel to depths greater than 100' in the locations of the new piers. The use of 48" piles will result in approximately 650 cubic yards of material removed from the piles. The new bridge will be approximately 51' wide consisting of 2 12' traveled ways, 2 8' shoulders, a 5' wide sidewalk (only on the southern side of the bridge) and a 2' wide positive barrier between the southern shoulder and the sidewalk. There will also be 2 2' wide bridge rails on the outside of the new bridge.

Caltrans 3/6/2006

The new bridge will be constructed of pre-cast box girders approximately 100' long. This will allow for a spacing of approximately 100' between the bents reducing the impact to the river from the piles.

An unnamed creek on the USGS Geyserville Quad sheet, commonly know as Plug Creek, is located in the south eastern quadrant of the project. Construction of the new bridge and its approach fills will necessitate placing approximately 100 feet of Plug Creek into a culvert prior to discharging it to the Russian River. The culvert will be 78" steel spiral ribbed culvert and will include rock slope protection at the outfall to dissipate the water energy prior to entering the Russian River. Plug Creek is an intermittent stream whose outfall is approximately 10' above the normal water surface elevation of the Russian River and does not have a fish population.

The construction zone is estimated to be approximately 220' wide, 110' on each side of the center line of the existing road extending approximately 300' past both the existing east and west abutments. The construction area, based on these estimates, will encompass about 8 acres. Approximately 2.5 acres of these 8 acres are within the banks of the Russian River. The remaining 5.5 acres is upland area. Some of this upland area will only be 'aerial' encroachments and will not involve any on-the-ground disturbance.

Proposed micro-tunneling for PG&E gas line 30' under river bed not subject to DFG 1602, ACOE 404 due to distance under river bed and distance from top of bank on east and west sides of river. Caltrans will work with the State Water Resources Control Board to obtain a Small Linear Underground Project General Permit for the micro-tunneling of the gas line.

River bed access will be from the western downstream side of the bridge. The area that is available for access will be delimited by high visibility fencing. No vehicle storage, fueling, or swamping will be allowed on the river bed. No vehicles are allowed in the active wetted river channel.

Equipment and material storage areas for construction is expected to be on the existing roadway approximately 300 feet behind the existing east and west bridge abutments and 110 feet on either side of the existing centerline. Other areas for storage will be inside the construction zone.